

Opal formed in an active monsoon trough in the South China Sea. The first evidence of a weak surface low appeared in the trough on the 1st of October. However, it wasn't until late on the 3rd that significant cloudiness associated with the incipient storm became apparent.

Early on 4 October, Opal reached minimal tropical storm intensity about 75 nm northwest of Nanshan Island. She moved to the northwest at 6 to 7 knots in response to the high pressure cell over eastern China. By the 5th, she had developed typhoon strength winds (Figure 4-20).

On the morning of the 6th, Opal abruptly changed her course and moved northeastward. She remained on this course for the next 12 hours before resuming a westnorthwesterly heading. A reasonable explanation for the temporary eastward movement may rest in a Fujiwhara interaction with typhoon Nora. Nora was positioned in the Philippine Sea about 750 nautical miles from Opal and

reached maximum intensity almost coincidentally with the eastward shift in Opal. Also, Nora turned to a more northerly track at this time. Brand (1968) reports a maximum distance for interaction of about 750 nautical miles. He demonstrates that the angular change rate of a line connecting the storms at this distance should be very small, only 3 degrees per 12 hours. The actual change was somewhat smaller, indicating the weakness of the interaction. The short period of the interaction may be due to the terrain effects of the intervening Republic of the Philippines, among other factors, as Brand suggests that the binary rotation is due to the circulation of the inflow layer which occupies only the lowest few thousand feet.

Maximum winds of 70 to 75 knots were observed during the 6th and early on the 7th as Opal resumed her westnorthwest movement. Opal moved ashore north of Qui Nhon, Republic of Vietnam late on 7 October and rapidly dissipated.

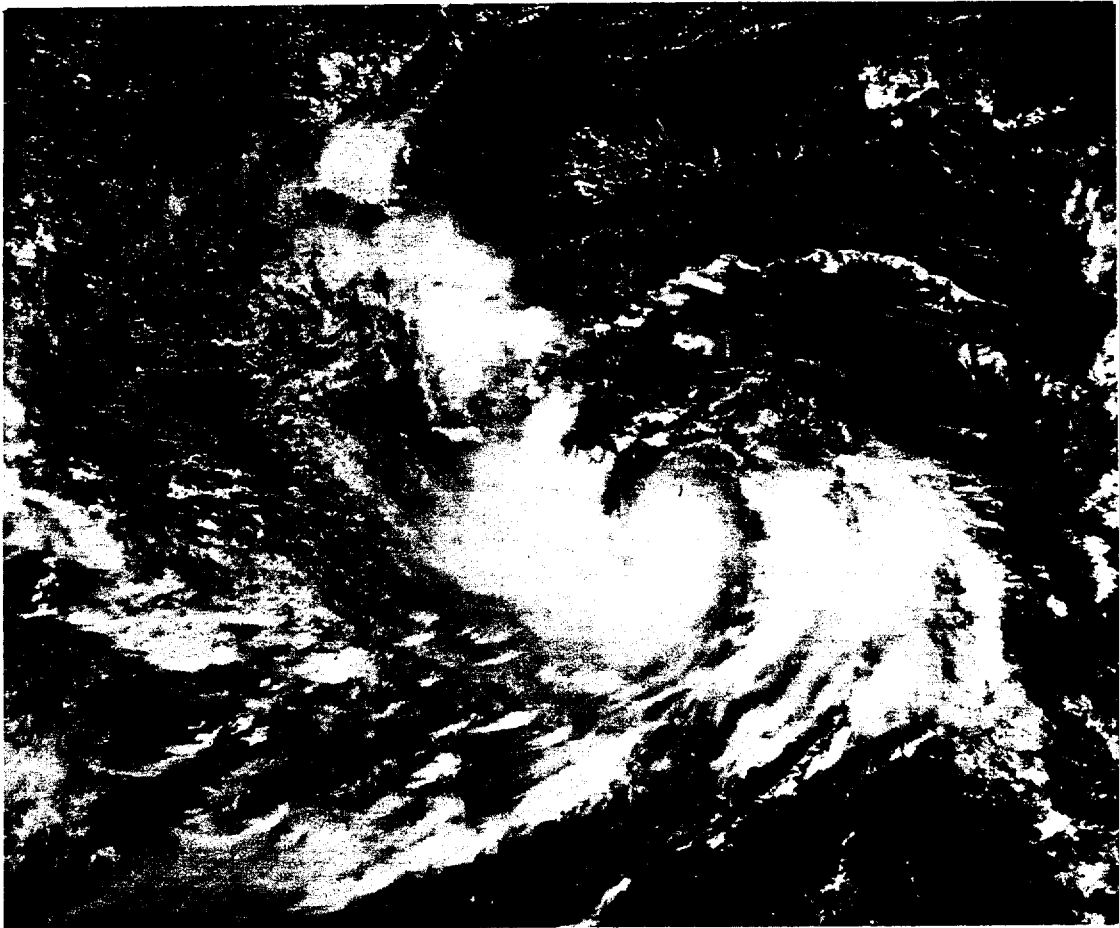


FIGURE 4-20. Tropical Storm Opal in the South China Sea 225 nm southeast of Qui Nhon, 5 October 1973, 0458 GMT. (DMSP imagery)